

REMARKS

In the Office Action dated April 20, 2005, claim 22 was objected; claim 1 was rejected under 35 U.S.C. § 112, ¶ 2; claims 1-5 were rejected under § 102 over U.S. Patent No. 6,535,518 (Hu); and claims 6-23 were rejected under § 103 over Hu in view of U.S. Patent No. 6,757,753 (DeKoning).

CLAIM OBJECTION AND REJECTION UNDER 35 U.S.C. § 112, ¶ 2

Claims 1 and 22 have been amended to address the claim objection and § 112 rejection.

REJECTIONS UNDER 35 U.S.C. §§ 102 AND 103

Amended claim 1 recites subject matter similar to the subject matter of former claim 6 (now cancelled). Former claim 6 was rejected as being obvious over the asserted combination of Hu and DeKoning. It is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to the subject matter of claim 1 for at least the following two reasons: (1) no motivation or suggestion existed to combine the teachings of Hu and DeKoning; and (2) the hypothetical combination of Hu and DeKoning does not teach or suggest all elements of the claim. See M.P.E.P. § 2143 (8th ed., Rev. 2), at 2100-129.

As conceded by the Office Action, Hu does not disclose first and second router nodes bridging a plurality of cluster nodes (connected via a SAN according to a SAN-based protocol) to a LAN. 4/20/2005 Office Action at 4. However, reliance was made on DeKoning as teaching this feature. Specifically, the Office Action cited a backup storage system 156 and remote data facility 158 of DeKoning as disclosing first and second router nodes. As described by DeKoning, the backup storage system 156 contains a copy of data from some or all of the logical volumes 122 made at a particular point in time to enable restoration of lost data. DeKoning, 5:48-53. The remote data facility 158 of DeKoning maintains a copy of the data from some or all of the logical volumes in a geographically remote storage 160 as backup in the event of catastrophic failure. DeKoning, 5:53-59. Note that the backup storage system 156 and remote data facility 158 of DeKoning are backup *storage* devices to *store* backup copies of data—the backup storage system 156 and remote data facility 158 of DeKoning *do not* constitute first and second routers bridging SAN cluster nodes to a LAN, as recited in claim 1.

The Office Action also cited a passage of DeKoning at column 7, lines 25-44. This passage refers to a snapshot/backup appliance 170, which creates a snapshot of data volumes in storage arrays to copy or backup the data volumes. DeKoning, 7: 29-33. Again, the snapshot/backup appliance 170 performs backup storage tasks, and does not teach or suggest the presence of first and second router nodes bridging SAN cluster nodes to a LAN as recited in the claim. Therefore, the hypothetical combination of Hu and DeKoning does not teach or suggest all elements of claim 1, since neither Hu nor DeKoning teaches or suggests the recited first and second routers.

Moreover, DeKoning does not suggest a modification of Hu to achieve the claimed invention. Hu is related to a system to allow a majority of traffic to bypass a server to improve traffic throughput. Hu, 5:3-6. Traffic that bypasses the server is directed to a storage system (or SAN). Hu, 5:12-15. The backup storage devices of DeKoning cited by the Office Action does not suggest duplication of this system of Hu to provide first and second router nodes bridging SAN cluster nodes to a LAN. Therefore, there existed no motivation or suggestion to combine Hu with DeKoning to achieve the claimed invention.

For the foregoing reasons, a *prima facie* case of obviousness has not been established with respect to claim 1.

Claim 13 has been amended from dependent form to independent form, with the scope of the claim remaining unchanged. The only changes to claim 13 are to its form, by deleting the word “architecture” at line 1, and by adding the words “a SAN according to” at line 2. Claim 13 was rejected as being obvious over Hu and DeKoning. The Office Action cited “Hu, QoS requirements and measurements” as teaching that at least one cluster node comprises a management node for setting routing policies on the router node. Note that claim 13 recites that a *cluster node*, connected to other cluster node(s) via a SAN according to a SAN-based protocol, comprises the management node for setting routing policies *on the router node*. There is no indication anywhere in Hu that the QoS requirements and measurements taught by Hu are set by a *cluster node*. In fact, although Hu generally refers to SAN, there is no further discussion of nodes in the SAN. Clearly, Hu does not teach or suggest this feature of claim 13. DeKoning also does not teach or suggest this feature. Therefore, the hypothetical combination of Hu and DeKoning does not teach or suggest all elements of claim 13.

Amended dependent claim 17 is also not obvious over Hu and DeKoning. Neither reference teaches or suggests the accessing and selecting elements of claim 17. Specifically, neither Hu nor DeKoning teaches or suggests accessing information that maps service types to respective SAN cluster nodes, and based on a service type specified by a received request and based on accessing the information, selecting one of the plural SAN cluster nodes. Therefore, the hypothetical combination of Hu and DeKoning does not teach or suggest all elements of claim 17.

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Amended independent claim 22 and newly added independent claim 31 are similarly allowable over Hu and DeKoning.

All dependent claims, including newly added dependent claims 24-30, are allowable for at least the same reasons as corresponding independent claims.

Allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 08-2025 (200304386-1).

Respectfully submitted,

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